

FIG 1

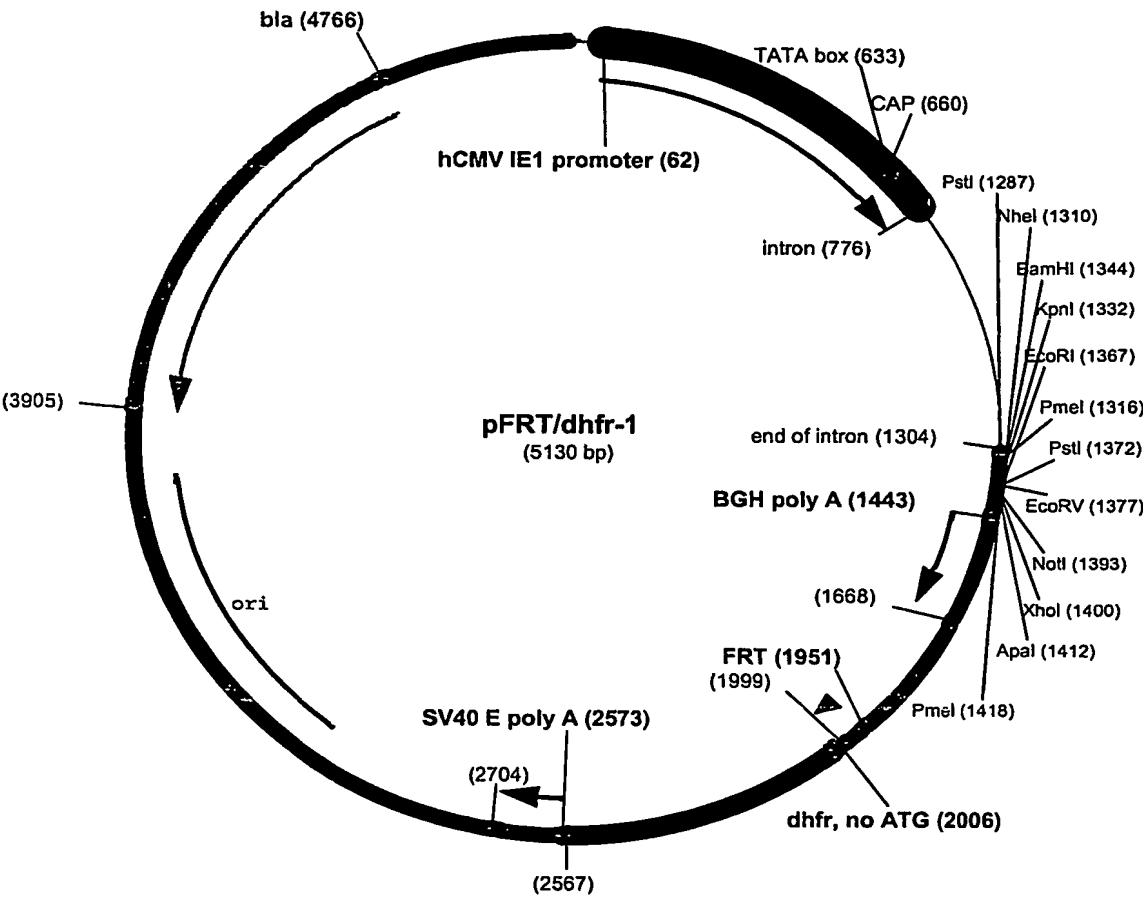


FIG 2

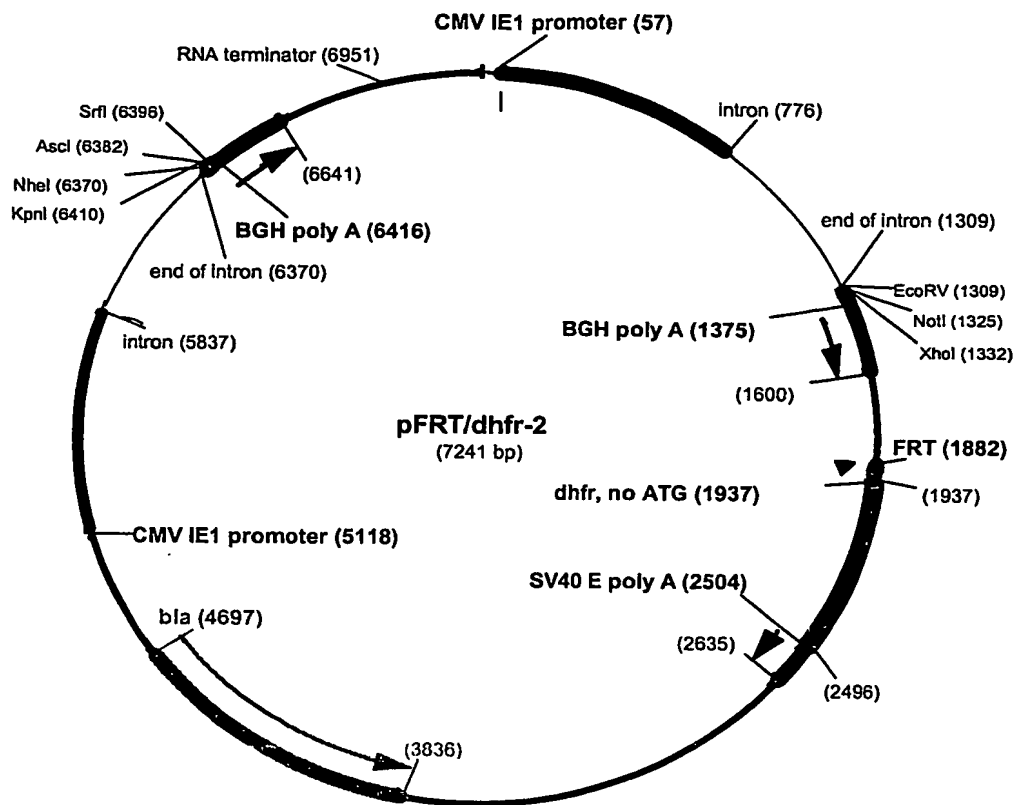


FIG 3

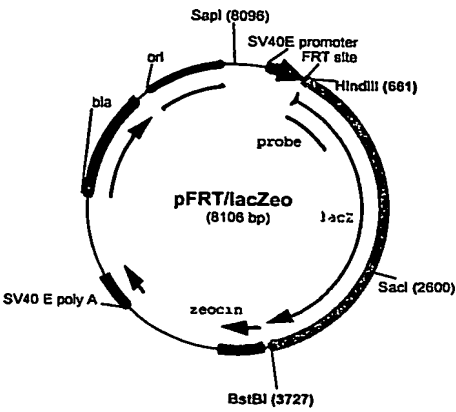


FIG. 4

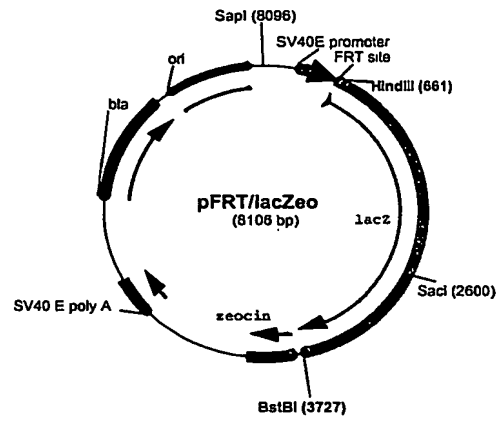


FIG. 5

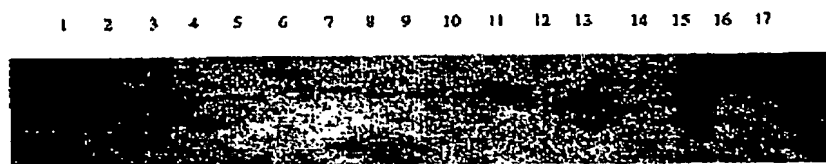


FIG. 6

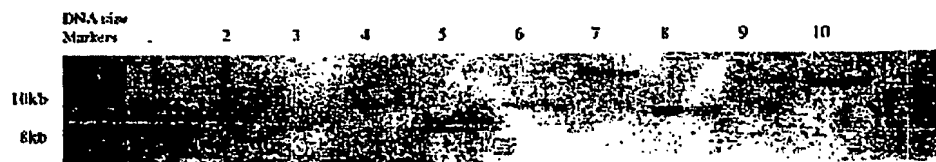


FIG. 7

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cgcggtGTGAGCGGATAACAATTTACACAGGAAACAGCTATGACCATGATTACGCCAAGCTTGACATTGATTATT  
GACTAGTTTATAATAGTAATCAATTACGGGGTCATTAGTTTCATAGCCCATATATGGAGTTCCGCGTTACATAACT  
TACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCCGCCATTGACGTCAATAATGACGTATGTTCCC  
ATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAG  
TACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCTGGCATTAT  
GCCAGTACATGACCTTATGGGACTTTCCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGT  
GATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTTGACTCACGGGGATTTCGAAGTCTCCACCC  
CATTGACGTCAATGGGAGTTTTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCTGAACAACTCCCG  
CCCATTGACGCAAATGGGCGGTAGGCGGTGACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTATGTAACCG  
TCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCG  
CGGCCGGGAACGGTGCATTGGAACGCGGATTCCCGGTGCCAAGAGTGACGTAAGTACCGCCTATAGAGTCTA  
TAGGCCCAACCCCTTGGCTTCTTATGCATGCTATACTGTTTTTGGCTTGGGGTCTATACACCCCGCTTCCTCAT  
GTTATAGGTGATAGCTTAGCCCTATAGGTGAGTCTGAGCAGTACTCGTTGCTGCCGCGCGCGCCACCATAG  
ATACITTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACCTCTCTTATTGGCTATATGCCAATACACTGTC  
CTTCAGAGACTGACACGGACTCTGTATTTTACAGGATGGGGTCTCATTTATTATTACAAATTCACATATACA  
ACACCACCGTCCCCAGTGCCCGCAGTTTTTATTAACATAACGTGGGATCTCCACGCGAATCTCGGGTACGTG  
TTCCGGAACGGTGGAGGGCAGTGATGCTGAGCAGTACTCGTTGCTGCCGCGCGCGCCACCATAG  
CTGACAGACTAACAGACTGTTCTTTCCATGGGTCTTTTCTGCAGTCACCGTCTTTCACACGCTAGCGTTTA  
AACTTAAGCTTGGTACCGAGCTCGGATCCACTAGTCCAGTGTGGTGGAATTCTGCAGATATCCAGCAGCATG  
GCGGCCGCTCGAGTCTAGAGGGCCCGTTTTAAACCCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCC  
ATCTGTTGTTTGGCCCTCCCCGTGCCTTCCTTGACCTTGGAAAGGTGCCACTCCCACTGCTTTCTCTAATAA  
AATGAGGAAATTCATCGCATGTCTGAGTAGGTGTCTATTCTGGGGGTGGGGTGGGGCAGGACAGC  
AAGGGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGGATGCGGTGGGTCTATGGCTTCTGAGGCGGA  
AAGAACCAGCTGGGGCTCTAGGGGGTATCCCCACGCGCCCTGTAGCGGCGCATTACGCGCGCGGGGTGTGG  
TGGTTACGCGCAGCGTGACCGCTACACTTGCAGCGCCCTGACGCCCCGCTCCTTTTCGCTTCTTCCCTTCTT  
TCTCGCACGTTCCGCGGCTTTCCCCGTCAAGCTCTAAATCGGGGGTCCCTTTAGGGTTCCGATTTAGTGCT  
TTACGGCACCTCGACCCCAAAAACTTGATTAGGGTGTGGTTACGTACCTAGAAAGTTCTATTCCGAAAGTT  
CCTATTCTCTAGAAAGTATAGGAACCTTCCTTGGGGTTCGACCATGAACTGCATCGTCGCGGTGCCAAAAAT  
ATGGGGATTGGCAAGAACGGAGACCTACCTGGCCTCCGCTCAGGAACGAGTTCAAGTACTTCCAAAGAAT  
GACCAACAACCTTTCAGTGGAAGGTAAACAGAATCTGGTGATTATGGGTAGGAAAACTGGTTCTCCATTCC  
TGAGAAGAATCGACCTTTAAAGGACAGAATTAATATAGTTCTCAGTAGAGAACTCAAAGAACCACCGAGG  
AGCTCATTTTTCTTGCCAAAAGTTTGATGATGCCTTAAGACTTATTGAACAACCGGAATTGGCAAGTAAAGTA  
GACATGGTTTGGATAGTCGGAGGCAGTTCTGTTTACCAGGAAGCCATGAATCAACCAGGCCACCTCAGACTC  
TTTGTGACAAGGATCGCAGGAATTTGAAAGTGACCGCTTTTCCAGAAATTGATTGGGGGATAATAAAC  
TTCTCCAGAAATCCAGGCGTCTCTCTGAGGTCCAGGAGGAAAAAGGCATCAAGTATAAGTTTGAAGTCT  
ACGAGAAGAAAGACTAAgatacAACTTGTATTGACGCTTATAATGGTTACAAATAAAGCAATAGCATCACAA  
ATTTACAAATAAAGCATTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAACTCATCAATGTATCTTATCATG  
TCTGtaTACCGTACGCTCTAGCTAGAGCTTGGCGTAACTGGTGCATAGCTGTTTCTGTGAAATTTGTTAT  
CCGCTCACAAATTCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGTGAGC  
TAACTCACATTAATTGCGTTGCGCTCACTGCCCCGTTTTCCAGTCGGGAAACCTGTGCGTCCAGCTGCATTAAT  
GAATCGGCCAACCGCGCGGGGAGAGGCGGTTTTGCGTATTGGGCGCTCTTCCGCTTCTCGCTCACTGACTCGC  
TGCGCTCGGTGCTTGGCTGCGGCGAGCGGTATCAGCTCAAAAGCGGTAATACGGTTATCCACAGAAT  
CAGGGGATAACCGCAGGAAAGAACATGTAGCAAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCG  
CGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGT  
GGCGAAACCCGACAGGACTATAAAGATACAGGCGTTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTT  
CGACCTGCGGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACG  
CTGTAGGTATCTCAGTTCCGTTGAGGTGTTCCGCTCAAGCTGGGCTGTGTGCACGAACCCCCGTTACGCC  
CGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTGGCA  
GCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCT  
AACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGA  
GTTGGTAGCTCTTGATCCGGCAAAACAAACCCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCAGATT  
ACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGA  
AACTCACGTTAAGGGATTTTGGTCAATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAATAAT  
GAAGTTTTAAATCAATCTAAAGTATATGAGTAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGC  
ACCTATCTCAGCGATCTGTCTATTTTCGTTTATCCATAGTTGCCCTGACTCCCCGTCGTGTAGATAACTACGATA  
GGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTAT  
CAGCAATAAACAGCCAGCCGGAAGGGCCGAGCGCAGAAAGTGGTCTGCAACTTTATCCGCTCCATCCAG  
TCTATTAATTGTTGCCGGGAAGCTAGAGTAAAGTTCGCCAGTTAATAGTTTGGCAACGTTGTTGCCATTG  
CTACAGGCATCGTGGTGTACGCTCGTCTGTTTGGTATGGTTCATTCAAGCTCCGTTCCCAAGCATCAAGGCG  
AGTTACATGATCCCCATGTTGTGCAAAAAAGCGGTTAGTCTCTCGGTCTCCGATCGTTGTACAGAAGTAAG  
TTGGCCGACGTGTATCACTCATGGTTATGGCAGCACTGCATAATTCTTACTGTCTATG

FIG. 8A (SEQ ID NO:1)

CCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGAC  
CGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCAT  
TGGAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCAC  
TCGTGCACCCAACGATCTTCAGCATCTTTTACTTTCAACGCGTTTCTGGGTGAGCAAAAACAGGAAGGCA  
AAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTCCTTTTCAATATTAT  
TGAAGCATTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAACAAATAGG  
GGTTCCGCGCACATTTCCCGAAAAAGTGCCACCTGACGTCGACGGATCGGGAGATCTCCCGATCCCCTATGG  
TGCACTCTCAGTACAATCTGCTCTGATGCCGATAGTTAAGCCAGTATCTGCTCCCTGCTTGTGTGTTGGAGG  
TCGCTGAGTAGTGC GCGAGCAAAATTTAAGCTACAACAAGGCAAGGCTTGACCGACAATTGCATGAAGAAT  
CTGCTTAGGGTTAGGCGTTTTGCGCTGCTTCGCGATGTACGGGCCAGATATA

**FIG. 8B (SEQ ID NO:1, cont.)**



gateccGTGAGCGGATAACAATTTACACAGGAAACAGCTATGACCATGATTACGCCAAGCTTGACATTGATTATT  
GACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACT  
TACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCATTGACGTCAATAATGACGTATGTTCCC  
ATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAG  
TACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCTGGCATTAT  
GCCCAGTACATGACCTTATGGGACTTTCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGT  
GATGCGGTTTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCGAAGTCTCCACCC  
CATTGACGTCAATGGGAGTTTGTGTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACTCCGC  
CCCATTGACGCAAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCCGTTATGGTGACG  
TCAGATCGCCTGGAGACGCCATCCACGTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCG  
CGGCCGGGAACGGTGCATTGGAACGCGGATTCCCCGTGCCAAGAGTGACGTAAAGTACCGCCTATAGAGTCTA  
TAGGCCACCCCCCTTGGCTTCTTATGCATGCTATACTGTTTTGGCTTGGGGTCTATACCCCCCGCTTCTCAT  
GTTATAGGTGATGGTATAGCTTAGCCTATAGGTGAGGTGAGGTGACCATTAAGCAGGCTCCGTTATGGTGACG  
ATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACCTCTCTTTATTGGCTATATGCCAATACACTGTC  
CTTCAGAGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCTCATTTATTATTACAAATTCACATATACA  
ACACCACCGTCCCCAGTGCCCGCAGTTTTTATTAAACATAACGTGGGATCTCCACGCGAATCTCGGGTACGTG  
TTCCGGAACGGTGGAGGGCAGTGTAGTCTGACGAGTCTGCTTGTGCTGCCGCGCGCCCAAGACATAAG  
CTGACAGCTAACAGACTGTTCCCTTTCCATGGGTCTTTCTGACGTACCGTCTTGAACGgatATCCAGCAC  
AGTGGCGGCCGCTCGAGTCTAGAGGGCCCCGTTTAAACCCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCC  
AGCCATCTGTTGTTGCCCTCCCCCGTGCCCTTCTTGACCCTGGAAGGTGCCACTCCCACTGTCTTTCCTA  
ATAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGA  
CAGCAAGGGGGAGGATTGGGAAGACAATAGCAGGCGATGCTGGGGATGCGGTGGGCTCTATGGCTTCTGAGG  
CGGAAAGAACCAGCTGGGGCTCTAGGGGGTATCCCCACGCGCCCTGTAGCGGCGCATTAAGCGCGGGCGGGT  
GTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCTTTCCGCTTCTTCCCTT  
CCTTTCTCGCCACGTTCCGCGGGCTTTCCCGTCAAGCTCTAAATCGGGGGTCCCTTTAGGGTCCGATTAGT  
GCTTTACGGCCTCGACCCCAAAAACCTTGATTAGGGTGTGATTGTTTACGTACCTAGAAAGTTCCTATTCCGAA  
GTTCTATTCTCTAGAAAGTATAGGAACCTTCCCTGGggGTTTCGACCATTGAACTGCATCGTCGCGGTGCCAA  
AATATGGGGATTGGCAAGAACGGAGACCTACCTGGCCTCCGCTCAGGAACGAGTTCAAGTACTTCCAAAG  
AATGACCACAACCTCTTCAGTGGAAGGTAAACAGAATCTGGTGATTATGGGTAGGAAAACCTGGTTCTCCAT  
TCCTGAGAGAATCGACCTTAAAGGACAGAATTAATATAGTTCTCAGTAGAGAACTCAAAGTTCCTATTCCGAA  
AGGAGCTCATTCTTGCCAAAAAGTTGGATGATGCCTTAAGACTTATTGAACAACCGGAATTGGCAAGTAA  
AGTAGACATGGTTTGGATAGTCGGAGGCAGTCTGTTTACCAGGAAGCCATGAATCAACCAGGCCACCTCAG  
ACTCTTTGTGACAAAGGATCATGCAGGAATTTGAAAGTGACACGTTTTTCCAGAAATTGATTTGGGGAATAT  
AAACTTCTCCAGAATACCCAGGCGTCTCTCTGAGGTCCAGGAGGAAAGGCATCAAGTATAAGTTTGAA  
GTCTACGAGAAGAAAGACTAAgtatacAACTTGTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATC  
ACAAATTTACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCATCAATGTATCTTAT  
CATGTCTGgtATACCGTTCGACCTCTAGCTAGAGCTTGCGCTAATCATGGTCATAGCTGTTTCTGTGTGAAATTG  
TTATCCGCTCACAATTCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGT  
GAGCTAACTCACTAATTTGCGTTGCGCTCACTGCCCGCTTTCCAGTCGGGAAACCTGTCTGCGCTCACTGAC  
TAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGGCTATTGGGCGCTCTTCCGCTTCTCTGCTCACTGAC  
TCGCTGCGCTCGGTGCTTCCGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATAAGGTTATCCACA  
GAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGG  
CCGCTTGTGCGCTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGA  
GGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTG  
TTCCGACCTGCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTC  
ACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCCGCTCCAAGCTGGGCTGTGTGCAGAACCCCCCGTTCA  
GCCCCGCGCTGCGCTTATCCGTAACATATCGTCTTGAGTCCAACCCGTAAGACACGACTTATCGCCACTG  
GCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTG  
GCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAA  
AAGAGTTGGTAGCTCTTGATCCGGCAAAACAAACCCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCA  
GATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGA  
CGAAAACTCACGTTAAGGATTTGGTCATGAGATTATCAAAAAGGATCTTACCTAGATCCTTTTAAATTA  
AATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAAAC

FIG 9A (SEQ ID NO:2)

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